

Work Order ID 76248

76248

Page 1

November-07-11-3:32:13 PM

Item ID: D212-664-107TRN

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Crosstube Turning Detail

Start Date: 07/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 21/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.L.J Date: 11/11/07 Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

| | |
|--------------|------------|
| D212-664-147 | Rev B(DE0) |
|--------------|------------|

100

0.00

100

MORI SEIKI CNC LATHE LARGE

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA705

2-Turn first side as per Folio FA113

3-Blend transition lines only, **do not sand whole tube**:

FOLIO REV: AA

DWG REV: B

*Use mill bastard file, brush file repeatedly with file card.

*Do not use sandpaper coarser than 320 grit.

110

QC1- Inspect dimensions to dimension sheet

0.00

110

QC

Memo

0.00

Quality Control

1 Ø

mem.l 11/11/23

1 Ø

mem.l 11/11/23

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 76248

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Page 2

November-07-11 3:32:13 PM

Item ID: D212-664-107TRN Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Turning Detail
 Start Date: 07/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 21/11/2011 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120 | MORI SEIKI CNC LATHE LARGE | 0.00 | | | | | | | |
| *120* | | | | | | | | | |
| Mori Seiki | Memo | 0.00 | | | | | | | |
| Mori Seiki CNC Lathe Large | 1-Turn second side as per Folio FA705 | | | | | | | | |
| | 2-Blend transition lines only, **do not sand whole tube**: *Use mill bastard file, brush file repeatedly with file card. *Do not use sandpaper coarser than 320 grit. FOLIO REV: <u> A </u> DWG REV: <u> B </u> | | | | | | | | |
| | 3- Remove plugs and sand | | | | | | | | |
| 130 | QC1- Inspect dimensions to dimension sheet | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

1 0

MAN. C 11/11/24

1 0

MAN. C 11/11/24

| W/O: | | WORK ORDER CHANGES | | | | | |
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NOTE: Date & initial all entries

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November-07-11 3:32:13 PM

Item ID: D212-664-107TRN Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Turning Detail
 Start Date: 07/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 21/11/2011 Req'd Qty: 1.00 ***1*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 140 *140* QC Quality Control | QC8- Inspect parts - second check Memo | 0.00 0.00 | | | | | | | |
| 145 *145* Crosstubes Crosstubes | Memo GRIND ONLY TRANSITION LINES SMOOTH LONGITUDE WAY. | 0.00 0.00 | | | | | | | |
| 150 *150* HandFXtube Hand Finishing Crosstubes | Crosstubes Chemical Conversion Memo | 0.00 0.00 | | | | | | | |

DP

11-11-28

1 0

mm.L 11/12/01

Mo 11-12-01

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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NOTE: Date & initial all entries

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Page 4

November-07-11 3:32:13 PM

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N900040100

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Revision ID:

Stop ***NS2***

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Start Date: 07/11/2011 Start Qty: 1.00

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Required Date: 21/11/2011 Req'd Qty: 1.00

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160 | QC3- Inspect Part Finish | 0.00 | | | | | | | |
| *160* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 170 | | 0.00 | | | | | | | |
| *170* | Packaging | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and stock in kanban rack Location: <u>LG</u> | | | | | | | | |
| 180 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *180* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

Handwritten signatures and dates: 11-12-01

Handwritten signature: SAD 11-12-01

Handwritten signature: 11/12/15

Handwritten signature: 11-12-01

| W/O: | | WORK ORDER CHANGES | | | | | |
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| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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NOTE: Date & initial all entries

Picklist Print

November-07-11 3:32:18 PM

Page 1

Work Order ID: 76248

76248

Parent Item: D212-664-107TRN

D212-664-107TRN

Parent Item Name: Crosstube Turning Detail

Start Date: 07/11/2011

Required Date: 21/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 08-03-06 DD Verified by:ec
IPP Rev B Removed polish 08.04.02 EC verified: DD

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

D6005-128

Manufactured

No

Each

26.0000

1

D6005-128

Crosstube Material

Location

Loc Qty

Loc Code

LG

26

26

(67797)

1

man 11/11/24

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

| | | |
|--|--|----------------------------------|
| DART AEROSPACE LTD | | Work Order: 76248 |
| Description: Crosstube Assembly (205/212/412 Low Fwd) | | Part Number: D212-664-147 |
| Inspection Dwg: D212-664-147 Rev: B | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Inspection Sheet Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|---------------------------------------|-----------|---------------------|---------|--------|-------------------------|----------|
| SIDE A | 0.313 | +/-0.010 | 0.313 | / | Vern | CWC-08 |
| | 2.360 | +0.005/-0.000 | 2.364 | / | | |
| | 2.360 | +0.005/-0.000 | 2.364 | / | | |
| | 2.366 | +0.005/-0.000 | 2.367 | / | | |
| | 2.473 | +0.005/-0.000 | 2.478 | / | | |
| | 2.573 | +0.005/-0.000 | 2.578 | / | | |
| | 2.673 | +0.005/-0.000 | 2.678 | / | | |
| | 2.750 | +0.005/-0.000 | 2.750 | / | | |
| | 2.750 | +0.005/-0.000 | 2.750 | / | | |
| | | | | | | |
| SIDE B | 0.313 | +/-0.010 | 0.313 | / | | |
| | 2.360 | +0.005/-0.000 | 2.364 | / | | |
| | 2.360 | +0.005/-0.000 | 2.364 | / | | |
| | 2.366 | +0.005/-0.000 | 2.367 | / | | |
| | 2.473 | +0.005/-0.000 | 2.478 | / | | |
| | 2.573 | +0.005/-0.000 | 2.577 | / | | |
| | 2.673 | +0.005/-0.000 | 2.678 | / | | |
| | 2.750 | +0.005/-0.000 | 2.750 | / | | |
| | 2.750 | +0.005/-0.000 | 2.750 | / | | |
| | | | | | | |
| | 0.126.528 | +/-0.020 | 126.548 | | Tap | mm-02 |

| | | | |
|------------------------------|--------------------------------|----------------------------|-----|
| Measured by: J. M. L. | Audited by: [Signature] | Prototype Approval: | N/A |
| Date: 11/11/23 | Date: 11-11-28 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|------------------------------|------------|----------|
| A | 08.11.07 | New Issue (P/O D212-664-107) | KJ/EC | |
| B | 10.02.02 | Dimension 126.528 was 126.53 | KJ | |

| W/O: | | WORK ORDER CHANGES | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

| Item | Qty -147 | Qty -147B | Part Number | Description |
|------|-------------|--------------|-------------------|---|
| 1 | X | | D212-664-147 | CROSSTUBE ASSEMBLY (205/212/412 LOW FWD) |
| 2 | | X | D212-664-147B | CROSSTUBE ASSEMBLY (214 LOW FWD) |
| 3 | 1 | 1 | D6019-128 | CROSSTUBE |
| 4 | 2 | 2 | D2893-1 | SUPPORT |
| 5 | 4 | 4 | D3595-063-450 | RUBBER CUSHION |
| 6 | 2 | 2 | D3659-1 | CUFF |
| 7 | 4 | 4 | MS21920-25 | CLAMP (OR MS21920-26) |
| 8 | 44 | 44 | CR3212-4-06 | RIVET (OR M7885/3-4-06) |
| 9 | A/R | A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |
| 10 | A/R | A/R | SIKAFLEX-241/-291 | SEALANT (OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT) |

GENERAL NOTES:

- MATERIAL: MANUFACTURED FROM D6019-128
FINISHED LENGTH = 126.528±0.020 (BEFORE BENDING/TRIMMING)
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF
USING VIBRATING STYLUS.
- WEIGHT: D212-664-147 = 24.2 lbs (PER IIN-D212-664)
D212-664-147B = 24.2 lbs (PER IIN-D212-664)
- PART IS SYMMETRIC ABOUT CENTERLINE.
- WHEN MACHINING TAPER, RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD
BE SMOOTH.
- BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6%
BASED ON O.D., EXCEPT UP TO 10% IS ALLOWED IN AREA NOTED.
- LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF
D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER
INSTALLATION AND PRIOR TO PACKAGING.
- INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2893-1
SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT.
- EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE
SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.
DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE
UNACCEPTABLE.
- TORQUE CLAMPS 80 TO 100 IN.-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS
NOT BOTTOMED-OUT AFTER TORQUING.
- INSTALL D3659-1 CUFF AFTER CHEMICAL CONVERSION COAT BUT BEFORE PAINT, WITH A LAYER OF
SIKAFLEX-241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT BETWEEN CUFF AND CROSSTUBE.
SEAL EDGE OF CUFF TO ENSURE NO GAPS.
- TOUCH-UP HOLES WITH CHEMICAL CONVERSION COAT.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 76248 M.C.J
11/11/07

DEO ATTACHED

Per EOW #1164
11.07.20
UNDER REVIEW
11/11/07

RELEASED
2009-10-29

| | | | |
|------------|---|--|--------------|
| B | REVISE GENERAL NOTES/PART LIST; UPDATE TO CURRENT STANDARDS: ADD -147B (ZN C4-2, D4-2) | RF | 09.09.30 |
| A | NEW ISSUE | CP | 07.07.07 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | RF | DRAWING NO. | REV. B |
| CHECKED | RF | D212-664-147 | SHEET 1 OF 4 |
| MFG. APPR. | RF | TITLE | SCALE |
| APPROVED | RF | CROSSTUBE (205/212/412 LOW FWD) | NTS |
| DE APPR. | RF | COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |
| DATE | 09.09.30 | | |

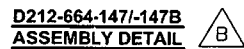
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NOTE: Date & initial all entries



ECN #11-614
OK. 07.20
UNDER REVIEW
CP 11.06.13

Diagram illustrating the application of Magnobond between the support and the cross-tube. The diagram shows a cross-section of the rear of the clamp assembly. The components labeled are:

- D2893-1 SUPPORT, REF**: The main support structure.
- D3595-063-450 RUBBER CUSHION UNDER CLAMP, REF**: The rubber cushion located under the clamp.
- 12**: A callout indicating the application of **MAGNOBOND** between the support and the cross-tube.
- 13** and **15**: Callouts for the **MS21920-25 CLAMP, REF**.

| | | | |
|------------|-----------|---|--------------|
| DESIGN | <i>Q</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | RF | | |
| CHECKED | <i>Q</i> | DRAWING NO. | REV. B |
| MFG. APPR. | <i>JS</i> | D212-664-147 | SHEET 2 OF 4 |
| APPROVED | <i>JS</i> | TITLE | SCALE |
| DE APPR. | <i>JS</i> | CROSSBUTE (205/212/412 LOW FWD) | NTS |
| DATE | 09.09.30 | COPYRIGHT © 2007 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

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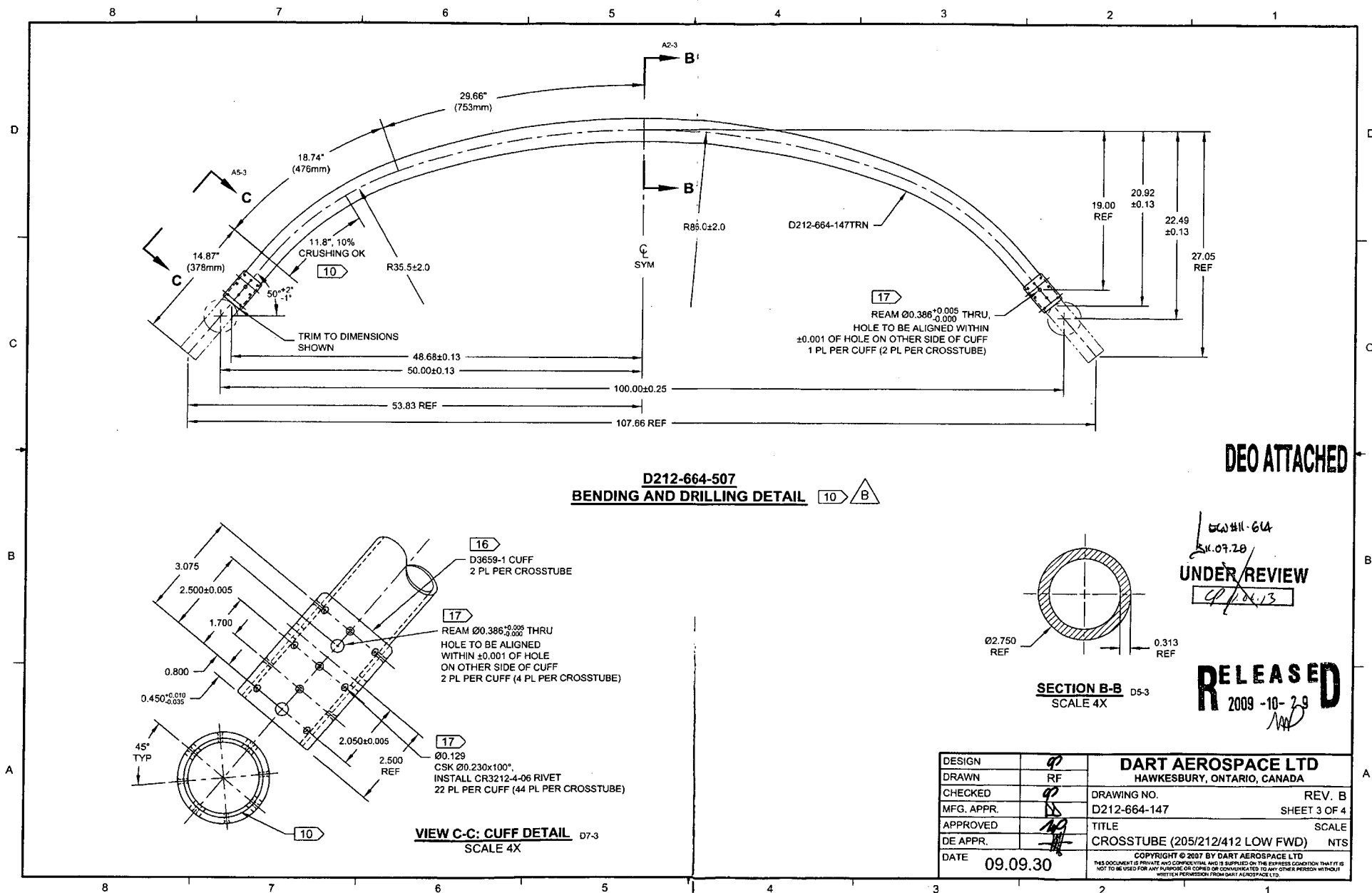
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NOTE: Date & initial all entries

76248



DEO ATTACHED

5011-64
 31.07.20
 UNDER REVIEW
 09/04/13

RELEASED
 2009-10-29

| W/O: | | WORK ORDER CHANGES | | | | | |
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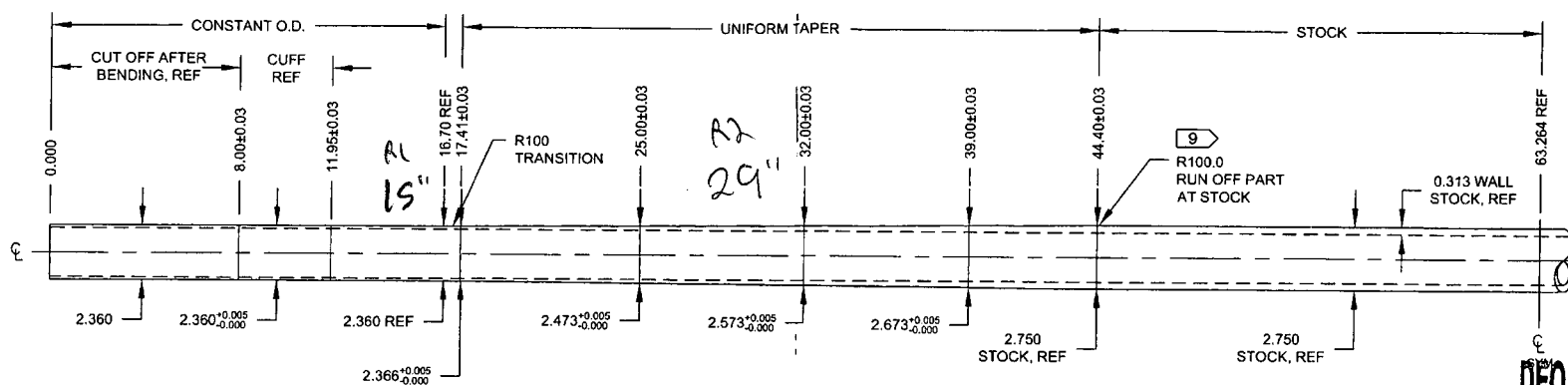
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

76248



| side A | | side B | |
|---------|---------|---------|---------|
| A1 | A2 | A1 | A2 |
| 1- .163 | 1- .250 | 1- .186 | 1- .282 |
| 2- .141 | 2- .278 | 2- .215 | 2- .297 |
| 3- .218 | 3- .308 | 3- .205 | 3- .280 |
| 4- .193 | 4- .285 | 4- .166 | 4- .260 |

D212-664-147TRN
TURNING DETAIL

DEO ATTACHED

ECO #1-614
11.07.26
UNDER REVIEW
11/06/13

RELEASED
2009-10-29

| | | | |
|--|----------|--|--------------|
| DESIGN | RF | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | RF | DRAWING NO. | REV. B |
| MFG. APPR. | RF | D212-664-147 | SHEET 4 OF 4 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | CROSSTUBE (205/212/412 LOW FWD) | NTS |
| DATE | 09.09.30 | COPYRIGHT © 2007 BY DART AEROSPACE LTD | |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

76248

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|-----------------------------|--|-------------------|---|--|--------------------------------|---------------------------|--------------|
| DRAWING NO. D212-664-147 | TITLE CROSSTUBE ASS'Y (205 LOW FWD) | REV. B | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D212-664-147-B-1 | SHEET NO. SHEET 1 OF 1 | SCALE NTS |
| DRAWN 92 | CHECKED ASS | MFG. APPR. 183 | APPROVED W.P. | | DE APPR. H | | |
| DATE 11.07.15 | DATE 11.07.20 | DATE 11.07.21 | DATE 11/07/21 | | DATE 11.07.21 | | |

PURPOSE:

REPLACE MAGNOBOND WITH PROSEAL.

CHANGE:

IS:

| Item | Qty -147 | Qty -147B | Part Number | Description |
|------|-------------|--------------|-----------------|-------------------------------|
| 9 | A/R | A/R | PROSEAL 890 B-2 | SEALANT, AMS-S-8802 CLASS B-2 |

WAS:

| | | | | |
|---|-----|-----|----------------|---|
| 9 | A/R | A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |
|---|-----|-----|----------------|---|

NOTE 12 & 15, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

- 12) TO INSTALL D2893-1 SUPPORT: ABRASE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. **PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.**

WAS:

- 12) INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
2011-07-28
W.P.

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries